CLAIMS

1. **(Currently Amended)** A computer-readable storage medium encoded with instructions that, when executed, direct a computer to perform a method, the method comprising:

 indicating via a graphical user interface, a range of accelerated bit rates at which media content may be received from a source;

 requesting the media content from the source at an accelerated bit rate selected from the range of accelerated bit rates~~from a source~~, the accelerated bit rate being a rate that exceeds a normal playback rate;

 receiving a media stream at the accelerated bit rate, wherein the media stream is an uninterrupted data stream of the media content that has no intentionally dropped data; and

 rendering all content in the media stream at the accelerated bit rate.

2. **(Previously Presented)** A computer-readable storage medium as recited in claim 1, wherein the media stream comprises a video stream and an audio stream, the rendering comprising:

 processing the video stream and the audio stream through a playback filter graph at the accelerated bit rate; and

 implementing a pitch adjustment algorithm within the playback filter graph to process the audio stream.

3. (Previously Presented) A computer-readable storage medium as recited in claim 2, wherein the media stream further comprises a non-video/non-audio data stream synchronized to the video stream and the audio stream, the rendering further comprising processing the non-video/non-audio data stream at synchronized locations within the video stream and the audio stream.

4. (Previously Presented) A computer-readable storage medium as recited in claim 3, wherein the non-video/non-audio data stream includes data selected from the group comprising:

    script commands;

    metadata; and

    captions.

5. (Previously Presented) A computer-readable storage medium as recited in claim 1, wherein the method further comprises:

    receiving a degraded media stream at a reduced rate, wherein the degraded media stream includes a subset of data from the media stream; and

    rendering the degraded media stream at the reduced rate.

6. (Previously Presented) A computer-readable storage medium as recited in claim 5, wherein the degraded media stream comprises a video stream that has dropped video frames and wherein an audio stream of the media stream has been dropped.

7. (Previously Presented) A computer-readable storage medium as recited in claim 1, wherein the source is selected from the group comprising:

a streaming media server; and

a local storage medium.

8. (Previously Presented) A computer comprising the computer-readable storage medium as recited in claim 1.

9. (Currently Amended) A computer-readable storage medium encoded with instructions that, when executed, direct a computing system to perform a method comprising:

receiving previously stored, non-live media content via a media stream;

determining a source of the media stream;

determining if the source can deliver the media stream at an accelerated bit rate designated by a user; and

<u>partially enabling</u>, enabling and disabling variable play speed controls depending on the source and on whether the source can deliver the media stream at the accelerated bit rate.

10. (Currently Amended) A computer-readable storage medium as recited in claim 9, wherein the <u>partially enabling</u>, enabling and disabling comprises enabling the variable play speed controls such that <u>any</u> play speeds <u>that are enabled do not</u> ~~cannot~~

exceed a maximum accelerated bit rate at which the source can deliver the media stream without intentionally dropping portions of the media content.

11. (Previously Presented) A computer-readable storage medium as recited in claim 9, wherein the determining if the source can deliver the media stream at an accelerated bit rate comprises determining an average data delivery rate from the source.

12. (Previously Presented) A computer-readable storage medium as recited in claim 9, wherein the method further comprises enabling the variable play speed controls if the source is a streaming media server capable of delivering the media stream at the accelerated bit rate.

13. (Currently Amended) A computer-readable storage medium as recited in claim 9, wherein the method further comprises:

~~disabling~~ partially enabling variable play speed controls in an accelerated playback range if the source is a streaming media server that is not capable of delivering the media stream at the accelerated bit rate but is capable of delivering the media stream at an accelerated rate that does not exceed the average data delivery rate; and

enabling variable play speed controls in a decelerated playback range.

14. (Previously Presented) A computer-readable storage medium as recited in claim 9, wherein the method further comprises disabling the variable play speed controls if the source is a web server delivering the media stream as a progressively downloaded file.

15. (Previously Presented) A computer-readable storage medium as recited in claim 14, wherein the method further comprises enabling the variable play speed controls after the media stream is completely downloaded from the web server.

16. (Previously Presented) A computer-readable storage medium as recited in claim 9, wherein the method further comprises enabling the variable play speed controls if the source is a local media source.

17. (Previously Presented) A computer-readable storage medium as recited in claim 9, wherein the method further comprises playing back the media stream at the accelerated bit rate, wherein the playing back includes rendering all content within the media stream.

18. (Previously Presented) A computer-readable storage medium as recited in claim 9, wherein the enabling and the disabling comprise altering graphical representations of the variable play speed controls on a graphical user interface.

19. (Previously Presented) A computer-readable storage medium as recited in claim 9, wherein the variable play speed controls include:

a play speed control configured to vary a playback rate of the media stream between a rate that is less than a real time rate and a rate that greater than the real time rate;

a fast forward control configured to increase the playback rate of the media stream to a rate that exceeds the real time rate;

a rewind control configured to decrease the playback rate of the media stream to a negative rate;

a seek control configured to access a particular playback location within the media stream;

a next frame control configured to step the playback rate of the media stream forward one video frame at a time; and

a previous frame control configured to step the playback rate of the media stream backward one video frame at a time.

20. (Previously Presented) A computer-readable storage medium as recited in claim 9, wherein the source is selected from a group comprising:

local media;

a streaming media server; and

a web server.

21. (Previously Presented) A computer-readable storage medium as recited in claim 9, wherein the media stream comprises data selected from the group comprising:

audio data;

video data;

script commands;

text captions; and

metadata.

22. (Previously Presented) A computer comprising the computer-readable storage medium as recited in claim 9.

23. (Currently Amended) A computer-readable storage medium encoded with instructions that, when executed, direct a computing system to perform a method, the method comprising:

determining a media source of a media file, the media file comprising a local media file, a progressive download media file from a web server, or a media stream from a streaming media server;

presenting via a graphical user interface, a variable play speed control that indicates a range of recommended non-real-time bit rates;

sending a request to ~~a~~ the media source to ~~stream media content from~~ deliver ~~a~~ the media file at a non-real-time bit rate selected by a user from the range of recommended non-real-time bit rates; ~~and~~

altering an appearance of the variable play speed control at the user graphic interface to indicate whether the variable play speed control is disabled, partially enabled or fully enabled;

in an event that the media source is the local media file, fully enabling the variable play speed control;

in an event that the media source is the progressive downloaded media file from the web server,

initially disabling the variable play speed control;

measuring an average rate at which the media file is being progressively downloaded from the web server;

partially enabling the variable play speed control to permit the user to request a non-real-time bit rate that does not exceed the average rate;

fully enabling the variable play speed control when the media file has been downloaded; and

in an event that the media source is the media file from the streaming media server,

determining if the media source and a network link can support the non-real-time bit rate without intentionally dropping data from the media content;

in an ~~even~~ event that the media source and the network link can support the non-real-time bit rate,

enabling ~~a~~ the variable play speed control ~~of a client device~~; and

receiving and playing back the media content at the non-real-time rate;

in an ~~even~~ event that the media source and the network link cannot support the non-real-time bit rate,

disabling the variable play speed control of the client device;

caching the media stream at the client device; ~~and~~

measuring an allowable rate at which the media file is being downloaded from the streaming media server;

partially enabling the variable play speed control to permit the user to request a non-real-time bit rate that does not exceed the allowable rate; and

fully enabling ~~re-enabling~~ the variable play speed control once the cached media stream can enable the non-real-time bit rate.

24. (Previously Presented) A computer-readable storage medium as recited in claim 23, wherein the non-real-time bit rate is a rate selected from the group comprising:

an accelerated bit rate; and

a decelerated bit rate.

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25. (Previously Presented)   A computer-readable storage medium as recited in claim 23, wherein the non-real-time bit rate is an accelerated bit rate, and wherein the method further comprises:

determining that the media source and/or the network link cannot support the accelerated bit rate without intentionally dropping data from the media content; and

sending a request to the media source to drop data from the media content and to stream remaining media content from the media file.

26. (Previously Presented) A computer-readable storage medium as recited in claim 25, wherein the remaining media content is streamed from the media source within a period of time equal to a period of time that would be needed to stream all the media content from the media source at the accelerated bit rate.

27. (Previously Presented) A computer-readable storage medium as recited in claim 25, wherein data dropped from the media content is selected from the group comprising:

an audio data stream;

video frames from a video data stream; and

a non-video/audio data stream.

28. (Previously Presented) A computer-readable storage medium as recited in claim 23, wherein the non-real-time bit rate is an accelerated bit rate, and wherein the method further comprises:

determining that the media source and/or the network link cannot support the accelerated bit rate without intentionally dropping data from the media content; and

in response to determining that the media source and/or the network link cannot support the accelerated bit rate without intentionally dropping data from the media content, sending a request to the media source to stream the media content stream from the media file at a normal real-time bit rate.

29. (Previously Presented) A computer comprising the computer-readable storage medium as recited in claim 23.

30. (Currently Amended) A computer-readable storage medium encoded with instructions that, when executed, direct a computing system to perform a method comprising:

streaming a media stream to a client at a real time rate;

receiving a request from the client to deliver the media stream at an accelerated bit rate; and

delivering the media stream to the client at the accelerated bit rate when the accelerated bit rate is within a delivery bit rate limitation, wherein no data is intentionally dropped from the media stream to achieve the accelerated bit rate-; and

delivering a video portion of the media stream and stopping delivery of an audio portion of the media stream to the client when the accelerated bit rate exceeds the delivery bit rate limitation, thereby enabling the client to display the video portion of the media stream at the accelerated bit rate.

31. (Previously Presented) A computer-readable storage medium as recited in claim 30, wherein the method further comprises:

determining that a network link cannot support the accelerated bit rate without dropping data from the media stream; and

delivering the media stream to the client at a reduced bit rate that is less than the accelerated bit rate without dropping data from the media stream.

32. (Previously Presented) A computer-readable storage medium as recited in claim 30, wherein the method further comprises:

determining that a network link cannot support the accelerated bit rate;

delivering the media stream to the client at a reduced rate that is less than the accelerated bit rate; and

while delivering the media stream to the client user at the reduced rate, dropping data from the media stream.

33. (Previously Presented) A streaming media server comprising the computer-readable storage medium as recited in claim 30.

34. (Currently Amended) A media player comprising variable play speed controls configured to <u>partially enable, enable and disable variable</u> ~~vary~~ playback speed <u>controls for playing</u> [[of]] a media stream depending on a source of the media stream and on whether the source can deliver the media stream at a requested bit rate, without

intentionally dropping data from the media steam to enable delivering the media stream at the requested rate.

35. (Currently Amended) A media player as recited in claim 34, further comprising a playback module configured to <u>partially enable,</u> enable or disable the variable play speed controls depending on the source and on whether the source can deliver the media stream at an accelerated bit rate, the playback module additionally configured to determine the source and whether the source can deliver the media stream at a requested rate.

36. (Original) A media player as recited in claim 34, further comprising a graphical user interface (GUI) module configured to support a GUI that presents the variable play speed controls to a user and enables the user to activate the variable play speed controls.

37. (Original) A media player as recited in claim 34, further comprising an application programming interface configured to expose the variable play speed controls to programmatic control of a custom application program.

38. (Original) A media player as recited in claim 34, wherein the variable play speed controls are selected from the group comprising:

a play speed control configured to vary a playback rate of the media stream between a rate that is less than a real time rate and a rate that greater than the real time rate;

a fast forward control configured to increase the playback rate of the media stream to a rate that exceeds the real time rate;

a rewind control configured to decrease the playback rate of the media stream to a negative rate;

a seek control configured to access a particular playback location within the media stream;

a next frame control configured to step the playback rate of the media stream forward one video frame at a time; and

a previous frame control configured to step the playback rate of the media stream backward one video frame at a time.

39. (Original) A computer comprising the media player as recited in claim 34.

40. (Currently Amended) A media player comprising:

controls for varying playback speed of a media stream, the controls comprising:

a play speed control configured to vary a playback rate of the media stream between a rate that is less than a real time rate and a rate that is greater than the real time rate;

a fast forward control configured to increase the playback rate of the media stream to a rate that exceeds the real time rate;

a rewind control configured to decrease the playback rate of the media stream to a negative rate;

a seek control configured to access a particular playback location within the media stream;

a next frame control configured to step the playback rate of the media stream forward one video frame at a time; and

a previous frame control configured to step the playback rate of the media stream backward one video frame at a time; and

a playback module configured to <u>partially enable,</u> enable and disable the controls to reflect a current play speed control capability, the current play speed control capability determined by the playback module according to a source of the media stream and whether the source can deliver the media stream at an accelerated bit rate designated by a user without intentionally dropping data from the media stream.

41. (Currently Amended) A media player as recited in claim 40, further comprising a playback module configured to <u>partially enable,</u> enable and disable the controls to reflect a current play speed control capability, the current play speed control

capability determined by the playback module according to a source of the media stream and whether the source can deliver the media stream at an accelerated bit rate.

42. (Original)   A media player as recited in claim 40, further comprising a graphical user interface (GUI) module configured to support a GUI graphical that presents the controls to a user and enables the user to activate the controls.

43. (Original)   A media player as recited in claim 40, further comprising an application programming interface configured to expose the controls to programmatic control of a custom application program.

44. (Original)   A computer comprising the media player as recited in claim 40.

45. (Currently Amended) A computer comprising:

means for indicating via a graphical user interface, a range of accelerated bit rates at which media content may be displayed;

means for requesting media content at an accelerated bit rate selected from the range of accelerated bit rates from a source;

means for receiving a media data stream from the source at the accelerated bit rate, wherein the media data stream has no intentionally dropped data of the media content; and

means for rendering all content in the media data stream at the accelerated bit rate.

46. (Previously Presented) A computer as recited in claim 45, wherein the media data stream comprises a video data stream, an audio data stream, and a non-video/audio data stream synchronized to the video data stream, the means for rendering further comprising:

means for processing the video data stream and the audio data stream through a playback filter graph at the accelerated bit rate;
means for implementing a pitch adjustment algorithm within the playback filter graph to process the audio data stream; and

means for processing the non-video/audio data stream at synchronized locations within the video data stream.

47. (Original) A computer as recited in claim 45, further comprising:
means for receiving a degraded media data stream at a reduced rate, wherein the degraded media data stream includes a subset of data from the media data stream; and

means for rendering the degraded media data stream at the reduced rate.

48. (Currently Amended) A computer comprising:
means for receiving a media stream;
means for determining a source of the media stream;

means for determining if the source can deliver the media stream at an accelerated bit rate without intentionally dropping data from the media stream; and

means for partially enabling, enabling and disabling variable play speed controls depending on the source and on whether the source can deliver the media stream at the accelerated bit rate.

49. (Currently Amended) A computer as recited in claim 48, wherein the means for partially enabling, enabling and disabling comprises means for enabling the variable play speed controls such that play speeds cannot exceed the accelerated bit rate at which the source can deliver the media stream.

50. (Previously Presented)   A computer as recited in claim 48, wherein the means for determining if the source can deliver the media stream at an accelerated bit rate comprises means for determining an average data delivery rate from the source.

51. (Previously Presented)   A computer as recited in claim 48, further comprising means for enabling the variable play speed controls if the source is a streaming media server capable of delivering the media stream at the accelerated bit rate.

52. (Previously Presented)   A computer as recited in claim 48, further comprising:

means for disabling variable play speed controls in an accelerated playback range if the source is a streaming media server that is not capable of delivering the media stream at the accelerated bit rate; and

means for enabling variable play speed controls in a decelerated playback range.

53. (Previously Presented) A computer as recited in claim 48, further comprising means for disabling the variable play speed controls if the source is a web server delivering the media stream as a progressively downloaded file.

54. (Previously Presented) A computer as recited in claim 53, further comprising means for enabling the variable play speed controls after the media stream is completely downloaded from the web server.

55. (Original) A computer as recited in claim 48, further comprising means for enabling the variable play speed controls if the source is a local media source.

56. (Previously Presented) A computer as recited in claim 48, further comprising means for playing back the media stream at the accelerated bit rate, wherein the playing back includes rendering all content within the media stream.

57. (Original) A computer as recited in claim 48, further comprising means for altering a graphical user interface having representations of the variable play speed controls to reflect the enabling and the disabling of the variable play speed controls.

58. (Currently Amended) A computer as recited in claim 48, wherein the variable play speed controls include:

a play speed control configured to vary a playback rate of the media stream between a rate that is less than a real time rate and a rate that greater than the real time rate, wherein the play speed control is enabled, disabled, or partially enabled;

a fast forward control configured to increase the playback rate of the media stream to a rate that exceeds the real time rate;

a rewind control configured to decrease the playback rate of the media stream to a negative rate;

a seek control configured to access a particular playback location within the media stream;

a next frame control configured to step the playback rate of the media stream forward one video frame at a time; and

a previous frame control configured to step the playback rate of the media stream backward one video frame at a time.

59. (Currently Amended) A computer comprising:

means for sending a request to a media source to stream media content from a media file at a non-real-time bit rate;

means for determining if the media source and a network link can support the non-real-time bit rate without intentionally dropping data from the media content; and

means for receiving and playing back the media content at the non-real-time bit rate if the media source and a network link can support the non-real-time rate without intentionally dropping data from the media content; and

means for receiving only video data and stopping receipt of audio data of the media stream if the media source and a network link cannot support the non-real-time rate without intentionally dropping data from the media content, thereby enabling playback of the video data of the media stream at the non-real-time bit rate.

60. **(Previously Presented)** A computer as recited in claim 59, wherein the non-real-time bit rate is a rate selected from the group comprising:

an accelerated bit rate; and

a decelerated bit rate.

61. **(Previously Presented)** A computer as recited in claim 59, wherein the non-real-time rate is an accelerated bit rate, the computer further comprising:

means for determining that the media source and/or the network link cannot support the accelerated bit rate without dropping data from the media content; and

means for sending a request to the media source to drop data from the media content and to stream remaining media content from the media file.

62. (Original) A computer as recited in claim 61, wherein data dropped from the media content is selected from the group comprising:

an audio data stream;

video frames from a video data stream; and

a non-video/audio data stream.

63. (Previously Presented) A computer as recited in claim 59, wherein the non-real-time bit rate is an accelerated bit rate, the computer further comprising:

means for determining that the media source and/or the network link cannot support the accelerated bit rate without intentionally dropping data from the media content; and

means for sending a request to the media source to stream the media content stream from the media file at a normal real-time rate.

64. (Currently Amended) A streaming media server comprising:

means for streaming a media stream to a client at a real time rate;

means for receiving a request from the client to deliver the media stream at an accelerated bit rate; ~~and~~

means for delivering the media stream to the client at the accelerated bit rate when the accelerated bit rate does not exceed a delivery bit rate limitation, without intentionally dropping data to achieve the accelerated bit rate~~.~~; and

means for delivering only key video frames and synchronized text captions that occur with the key video frames of the media stream to the client, when the accelerated bit rate exceeds the delivery bit rate limitation, to still enable the client to display the media stream at the accelerated bit rate.

65. (Previously Presented) A streaming media server as recited in claim 64, further comprising:

means for determining that a network link cannot support the accelerated bit rate; and

means for delivering the media stream to the client at a reduced rate that is less than the accelerated bit rate.

66. (Previously Presented) A streaming media server as recited in claim 64, further comprising:

means for determining that a network link cannot support the accelerated bit rate;

means for delivering the media stream to the client at a reduced bit rate that is less than the accelerated bit rate; and

means for dropping data from the media stream while delivering the media stream to the client user at the reduced bit rate.

67. (Currently Amended) A streaming media server comprising a variable speed streaming module configured to indicate a range of allowable accelerated bit

rates and receive a request to stream media content at an accelerated bit rate in the range of allowable accelerated bit rates and to stream the media content at the accelerated bit rate without dropping any data from the media content, the accelerated bit rate being a rate that exceeds a real time playback rate of the media content.

68. (Original) A streaming media server as recited in claim 67, wherein the variable speed streaming module is further configured to control variable play speed controls of a media player executing on a client computer.

69. (Currently Amended) A method comprising:

indicating via a graphical user interface, a range of accelerated bit rates for displaying media content;

rendering a stream of media at a real time playback rate;

receiving a request to render the stream of media at an accelerated bit rate in the range of accelerated bit rates;

sending a request to have the stream of media delivered at the accelerated bit rate;

receiving the stream of media at the accelerated bit rate, wherein the stream of media that is received at the accelerated bit rate has no intentionally dropped data; and

rendering the stream of media at the accelerated bit rate.

70. (Previously Presented) A method as recited in claim 69, wherein the media stream comprises a video stream and an audio stream and wherein rendering comprises:

processing the video stream and the audio stream through a playback filter graph at the accelerated bit rate; and

implementing a pitch adjustment algorithm within the playback filter graph to process the audio stream.

71. (Original) A method as recited in claim 70, wherein the media stream further comprises a non-video/non-audio data stream synchronized to the video stream and the audio stream and wherein rendering further comprises processing the non-video/non-audio data stream at synchronized locations within the video stream and the audio stream.

72. (Currently Amended) A method comprising:

receiving a media stream from a source;

determining the source of the media stream;

determining if the source can deliver the media stream at an accelerated bit rate without intentionally dropping data from the media stream; and

partially enabling, enabling or disabling variable play speed controls depending on the source and on whether the source can deliver the media stream at the accelerated bit rate without intentionally dropping data from the media stream.

73. (Currently Amended) A method as recited in claim 72, further comprising:

partially enabling the variable play speed controls to enable user selection of only those accelerated bit rates that do not exceed a delivery bit rate limitation;

enabling the variable play speed controls if the source is a streaming media server capable of delivering the media stream at the accelerated bit rate; and

disabling the variable play speed controls if the source is a streaming media server that is not capable of delivering the media stream at [[the]] an accelerated bit rate.

74. (Previously Presented) A method as recited in claim 72, wherein the source is a web server delivering the media stream as a progressively downloaded file, the method further comprising:

disabling the variable play speed controls while the progressively downloaded file is being delivered; and

enabling the variable play speed controls after the progressively downloaded is completely downloaded.